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EXAMINER

NGUYEN, BRIAN D

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 10/03/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/607,066

Applicant(s)

STONE ET AL.

Examiner

Brian D Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on the application filed 6/29/00.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-25 and 27-51 is/are rejected.
- 7) ☒ Claim(s) 6 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claim 37 is objected to because of the following informalities:

Claim 37, line 5-6, "said allocated isochronous channel" seems to refer back to "an allocated memory channel". If this is true, it is suggested to change "said allocated isochronous channel" to ---said allocated memory channel---.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 12, 16-20, 32, 36, 38-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 recites the limitation "said required memory field" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation "said system bus" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 17 recites the limitation "said system bus" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 18 recites the limitation "said system bus" in line 2. There is insufficient antecedent basis for this limitation in the claim.

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Claim 32 recites the limitation "said required memory field" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 36 recites the limitation "said system bus" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 38 recites the limitation "said system bus" in line 2. There is insufficient antecedent basis for this limitation in the claim.

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-44 and 50-51 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 of copending Application No. 10/352,260. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application's claims 1-14 and 50-51 merely broaden the scope of US application No. 10/352,260 claims 1-22 by eliminating an asynchronous memory for storing asynchronous data on a non-priority basis. It has been held that the omission

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of an element and its function is an obvious expedient if the remaining elements perform the same function as before.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1-2, 6-22, 26-43, and 50-51 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-30 of U.S. Patent No. 6,578,109. Although the conflicting claims are not identical, they are not patentably distinct from each other because they contain substantially the same elements.

7. Claims 3-5, 23-25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 16 of U.S. Patent No. 6,578,109 in view of U.S. Patent No. 6,453,376. Regarding claims 3-5 and 23-25, U.S. Patent No. 6,578,109 discloses all the claimed subject matter except for the use of IEEE 1394 serial bus, computer device, a set-top box, a audio-video device. However, U.S. Patent No. 6,453,376 discloses the use of these elements (see claims 2 and 3 in column 10). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use IEEE 1394 serial bus in the network that include computer device, set-top box... so that the communication between devices can be faster.

### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Abramson et al (6,192,428).

Regarding claims 1-2, Abramson discloses a system (100) for implementing an electronic device comprising a transmission source configured to provide priority information include isochroous data for use by the device; a memory device for storing priority information (isochroous data); and a processor for utilizing the priority information (see 105 & 120 of figure 1; 225 of figure 2; col. 3, lines 34-49).

Regarding claims 3-5, Abramson discloses the processor coupled to the devices (150, 160) through 1394 serial bus (see 155 of figure 2).

Regarding claims 21-25, claims 21-25 are method claims that have substantially all the limitations of the respective apparatus claims 1-5. Therefore, they are subject to the same rejection.

Regarding claims 41-44, Abramson discloses the memory includes a random access memory and configured to include isochroous memory which operate as a FIFO and a system

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bus includes an asynchronous bus and an isochroous bus (see figures 1 & 2; col. 2, lines 50-67; and col. 3, lines 34-49).

Regarding claims 50 and 51, claims 50 and 51 are program instructions and system claims that have substantially all the limitations of the respective apparatus claim 1. Therefore, they are subject to the same rejection.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 7-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abramson et al (6,192,428) in view of Nizar et al (6,378,056).

Regarding claims 7-17, Abramson does not specifically disclose the memory device comprises a controller, channels, and registers; and setting up a new memory channel. Nizar discloses a memory device comprises a controller, channels, and registers, and a method for setting up the new channel (see abstract; col. 13, lines 21-51). Abramson in view of Nizar does not explicitly disclose the steps such as checking memory availability, a channel allocation message, and a setup completion message. However, it is well known in the art that in order to allocate a new channel, it is necessary to check if any channel is available and a channel allocation message is necessary because without a request no channel will be allocated and a completion message is also necessary to confirm the completion of the setup process. Therefore,

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it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use memory controller and registers as taught by Nizar and use the necessary steps for setting up a new channel as they are well known in the system of Abramson in order to control and effectively use of the memory.

Regarding claims 27-37, claims 27-37 are method claims that have substantially all the limitations of the respective apparatus claims 7-17. Therefore, they are subject to the same ejection.

Regarding claims 45-49, Abramson does not specifically disclose a control bus which includes a transfer indicator, memory channel and read/write operations. However, Nizar discloses these features (see abstract and col. 3, lines 29-45). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to control read/write operation as taught by Nizar in the system of Abramson so that data can be orderly read or written into the memory.

***Allowable Subject Matter***

12. Claims 6 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Claims 18-20 and 38-40 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.



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*Conclusion*

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Garney et al (6,101,613), Garney et al (6,260,119), Hewitt et al (6,151,651), Kuver et al (6,438,604), Baker (6,333,938), and Anderson et al (6,594,711) are all cited to show a method of storing isochroous information into a memory which are considered pertinent to the claimed invetion..

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D Nguyen whose telephone number is (703) 305-5133.

The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.



Brian Nguyen